

## Sensor/Actuator cable - SAC-4P-M8MR/ 1,5-542/FR SCO BK - 1406210


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Sensor/Actuator cable, 4-position, PVC, yellow, Plug angled M8, on Socket angled M12 SPEEDCON, A-coded, Cable length: 1.5 m



### Key Commercial Data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 1 STK                                                                                                   |
| Minimum order quantity | 50 STK                                                                                                  |
| GTIN                   | <br>4 046356 798402 |
| GTIN                   | 4046356798402                                                                                           |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 1.5 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |
|                                 | IP68                             |

#### General

|                              |                               |
|------------------------------|-------------------------------|
| Rated current at 40°C        | 4 A                           |
| Rated voltage                | 30 V                          |
| Number of positions          | 4                             |
| Insulation resistance        | ≥ 100 MΩ                      |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
|                              | M8 connector IEC 61076-2-104  |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |

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## Technical data

### General

|                             |                        |
|-----------------------------|------------------------|
| Overvoltage category        | II                     |
| Degree of pollution         | 3                      |
| Insertion/withdrawal cycles | ≥ 100                  |
| Torque                      | 0.4 Nm (M12 connector) |
|                             | 0.2 Nm (M8 connectors) |

### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB                                          |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |
| Sealing material                       | NBR                                         |

### Standards and Regulations

|                                        |                 |
|----------------------------------------|-----------------|
| Standard designation                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Standard designation                   | M8 connector    |
| Standards/regulations                  | IEC 61076-2-104 |
| Flammability rating according to UL 94 | HB              |

### Cable

|                                               |                           |
|-----------------------------------------------|---------------------------|
| Cable type                                    | PVC yellow 105 °C         |
| Cable type (abbreviation)                     | 542                       |
| UL AWM style                                  | 2517 (105 °C / 300 V)     |
| AWG signal line                               | 24                        |
| Core diameter including insulation            | 1.12 mm ±0.03 mm          |
| Wire colors                                   | brown, blue, black, white |
| Overall twist                                 | 4 wires, twisted          |
| External sheath, color                        | yellow                    |
| External cable diameter D                     | 4.4 mm ±0.2 mm            |
| Minimum bending radius, flexible installation | 8 x D                     |
| Cable weight                                  | 25 kg/km                  |
| Outer sheath, material                        | PVC                       |
| Material conductor insulation                 | PVC                       |
| Conductor material                            | Tin-plated Cu litz wires  |
| Insulation resistance                         | ≥ (550 M Ohms/m @ 500V)   |
| Conductor resistance                          | max. 79.7 Ω/km (20° C)    |
| Nominal voltage, cable                        | 300 V                     |
| Flame resistance                              | FT4                       |
| Other resistance                              | UV resistant              |

# Sensor/Actuator cable - SAC-4P-M8MR/ 1,5-542/FR SCO BK - 1406210

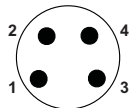
## Technical data

### Cable

|                                 |                                               |
|---------------------------------|-----------------------------------------------|
| Ambient temperature (operation) | -30 °C ... 105 °C (cable, fixed installation) |
|---------------------------------|-----------------------------------------------|

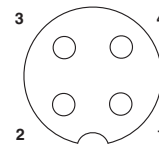
## Drawings

Schematic diagram



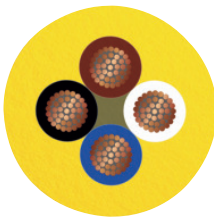
Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



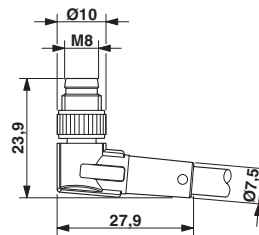
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



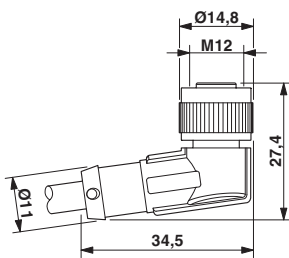
PVC yellow 105 °C [542]

Dimensional drawing



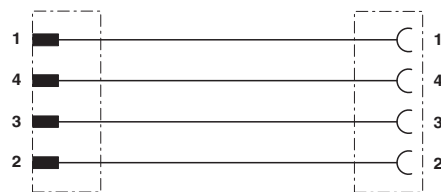
M8 x 1 male plug, angled version

Dimensional drawing



M12 x 1 socket, angled

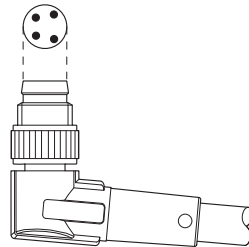
Circuit diagram



Contact assignment of M8 plugs / M12 sockets

# Sensor/Actuator cable - SAC-4P-M8MR/ 1,5-542/FR SCO BK - 1406210

Schematic diagram



Layout of connector pin assignments

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

|                    |  |                                                                                                                                                       |               |
|--------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| UL Listed          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
|                    |  |                                                                                                                                                       |               |
| Nominal current IN |  | 4 A                                                                                                                                                   |               |
| Nominal voltage UN |  | 125 V                                                                                                                                                 |               |

|                    |  |                                                                                                                                                       |               |
|--------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
|                    |  |                                                                                                                                                       |               |
| Nominal current IN |  | 4 A                                                                                                                                                   |               |
| Nominal voltage UN |  | 125 V                                                                                                                                                 |               |

|              |  |  |  |
|--------------|--|--|--|
| cULus Listed |  |  |  |
|--------------|--|--|--|

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PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>